

What is claimed is:

1. A transmit-receive FM-CW radar apparatus which
switches between transmission and reception by time
division control, wherein an amplifier capable of gain
5 control is provided in a transmitter signal path or a
receiver signal path, and wherein when said amplifier is
provided in said receiver signal path, said amplifier is
controlled so as to suppress said gain in a first half of
a receive timing interval, while when said amplifier is
10 provided in said transmitter signal path, said amplifier
is controlled so as to suppress said gain in a second
half of a transmit timing interval.

2. A transmit-receive FM-CW radar apparatus as
claimed in claim 1, wherein amplifiers are provided in
15 said transmitter signal path and said receiver signal
path, respectively, and said switching between
transmission and reception is performed by operating said
amplifier provided in said transmitter signal path and
said amplifier provided in said receiver signal path in
20 alternating fashion in synchronism with said transmit and
receive timings.

3. A transmit-receive FM-CW radar apparatus as
claimed in claim 1, wherein the suppression of said gain
is performed in such a manner as to reduce the amount of
25 said suppression gradually from a leading edge toward a
midpoint of said receive timing interval or from a
trailing edge toward a midpoint of said transmit timing
interval.

4. A transmit-receive FM-CW radar apparatus as
claimed in claim 2, wherein the suppression of said gain
is performed in such a manner as to reduce the amount of
30 said suppression gradually from a leading edge toward a
midpoint of said receive timing interval or from a
trailing edge toward a midpoint of said transmit timing
interval.

5. A transmit-receive FM-CW radar apparatus as
claimed in claim 1, wherein the suppression of said gain

5 is performed in such a manner as to reduce the amount of
 said suppression stepwise from a leading edge toward a
 midpoint of said receive timing interval or from a
 trailing edge toward a midpoint of said transmit timing
 interval.

10 6. A transmit-receive FM-CW radar apparatus as
 claimed in claim 2, wherein the suppression of said gain
 is performed in such a manner as to reduce the amount of
 said suppression stepwise from a leading edge toward a
 midpoint of said receive timing interval or from a
 trailing edge toward a midpoint of said transmit timing
 interval.

15 7. A transmit-receive FM-CW radar apparatus as
 claimed in claim 2, wherein a plurality of amplifiers are
 provided in said receiver signal path, wherein one of
 said amplifiers is provided with a means for
 accomplishing said switching between transmission and
 reception, while the other one of said amplifiers is
 provided with a means for suppressing said gain in the
20 first half of said receive timing interval.

25 8. A transmit-receive FM-CW radar apparatus as
 claimed in claim 1, wherein the suppression of said gain
 by said amplifier is performed by varying a voltage
 applied to said amplifier.

30 9. A transmit-receive FM-CW radar apparatus as
 claimed in claim 2, wherein said switching between
 transmission and reception by said amplifiers is
 performed by varying voltages applied to said amplifiers.

35 10. A transmit-receive FM-CW radar apparatus which
 switches between transmission and reception by time
 division control, wherein an amplifier capable of
 controlling gain is provided in a transmitter signal path
 or a receiver signal path, and a multiplier capable of
 controlling power is provided in said transmitter signal
 path or in a branch section branching off a directional
 coupler in said transmitter signal path, and wherein a
 voltage applied to said multiplier (Mt) provided in said

transmitter signal path is varied so as to suppress power in a second half of a transmit timing interval, while a voltage applied to said multiplier (Mr) provided in said branch section is varied so as to suppress power in a first half of a receive timing interval.